1...Write an app to toast your joining date and course selected for engineering using date picker and list view.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match parent"
    android:paddingBottom="@dimen/activity vertical margin"
    android:paddingLeft="@dimen/activity horizontal margin"
    android:paddingRight="@dimen/activity horizontal margin"
    android:paddingTop="@dimen/activity vertical margin"
    tools:context="com.tutorialsface.final1.MainActivity">
<TableLayout
    android:layout width="match parent"
    android:layout height="match parent">
    <TextView
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="Joining Date :"
        android:id="@+id/textView"
        android:layout alignParentTop="true"
        android:layout alignParentStart="true" />
    <DatePicker</pre>
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:id="@+id/datePicker"
        android:layout alignParentTop="true"
        android:layout toEndOf="@+id/textView" />
    <TextView
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="Course : "
        android:id="@+id/textView2"
        android:layout_below="@+id/textView"
        android:layout alignParentStart="true" />
    <ListView
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:id="@+id/listView"
        android:choiceMode="multipleChoice" />
</TableLayout>
</RelativeLayout>
package com.tutorialsface.final1;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
```

```
import android.widget.DatePicker;
import android.widget.ListView;
import android.widget.TextView;
import android.widget.Toast;
import java.util.ArrayList;
public class MainActivity extends AppCompatActivity {
    DatePicker datePicker;
    ListView listView;
    String[] values = new String[] {"ISE", "CSE", "ECE"};
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        datePicker = (DatePicker) findViewById(R.id.datePicker);
        listView = (ListView) findViewById(R.id.listView);
        ArrayAdapter<String> adapter = new
ArrayAdapter<String>(this, android.R.layout.simple list item 1, values);
        listView.setAdapter(adapter);
        listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view,
                                    int position, long id) {
                TextView temp=(TextView) view;
                String Value = listView.getItemAtPosition(position).toString();
                Toast.makeText(getApplicationContext(),
                        "Course Selected : " + Value, Toast. LENGTH LONG)
                        .show();
        });
        Toast.makeText(getApplicationContext(),
                "Joining Date : " + datePicker.getDayOfMonth() + "/" +
datePicker.getMonth() + "/" + datePicker.getYear(),
                Toast. LENGTH LONG) . show();
    }
```

2...Write an app to demonstrate the activity lifecycle by logging the activities in the LogCat or toast at every stage

```
package com.tutorialsface.e2;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
```

```
import android.util.Log;
import android.view.View;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    String msg = "Android : ";
    /** Called when the activity is first created. */
    @Override
   public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        Toast.makeText(getApplicationContext(),"The onCreate()
event", Toast. LENGTH LONG) . show();
    /** Called when the activity is about to become visible. */
    @Override
   protected void onStart() {
        super.onStart();
        Toast.makeText(getApplicationContext(), "The onStart()
event", Toast. LENGTH LONG) . show();
    /** Called when the activity has become visible. */
    @Override
    protected void onResume() {
        super.onResume();
        Toast.makeText(getApplicationContext(), "The onResume()
event", Toast. LENGTH LONG) . show();
    /** Called when another activity is taking focus. */
    @Override
    protected void onPause() {
        super.onPause();
        Toast.makeText(getApplicationContext(), "The onPause()
event", Toast. LENGTH LONG) . show();
    /** Called when the activity is no longer visible. */
    @Override
   protected void onStop() {
        super.onStop();
        Toast.makeText(getApplicationContext(),"The onStop()
event", Toast. LENGTH LONG) . show();
    /** Called just before the activity is destroyed. */
    @Override
    public void onDestroy() {
        super.onDestroy();
        Toast.makeText(getApplicationContext(), "The onDestroy()
event", Toast.LENGTH_LONG) .show();
        Log.d(msg, "The onDestroy() event");
    }
```

.....

3...Create an application which generates a random color on each click

```
package com.tutorialsface.e3;
import android.graphics.Color;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.RelativeLayout;
import java.util.Random;
public class MainActivity extends AppCompatActivity {
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        final RelativeLayout r1 = (RelativeLayout) findViewById(R.id.relLayout); //
relLayout is the id from relativelayout
        r1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                r1.setBackgroundColor(randomColor());
        });
    int randomColor() {
        Random r = new Random();
        int red = r.nextInt(256);
        int green = r.nextInt(256);
        int blue = r.nextInt(256);
        return Color.rgb(red, green, blue);
    }
}
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity horizontal margin"
    android:paddingRight="@dimen/activity horizontal margin"
    android:paddingTop="@dimen/activity vertical margin"
    android:id="@+id/relLayout"
    tools:context="com.tutorialsface.e3.MainActivity">
    <TextView
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="Tap the screen to change colour!" />
</RelativeLayout>
```

4...Implement an app for flash screen using threads

```
package com.tutorialsface.final4;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        new Handler().postDelayed(new Runnable() {
        @Override
        public void run() {
            Intent i = new Intent (MainActivity.this, MainActivity2.class);
            startActivity(i);
            finish();
    },5*1000);
   protected void onDestroy() {
        super.onDestroy();
```

5...Implement web view concept in application which contains multiple activity and default HTML pages.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout width="match parent"
   android:layout height="match parent"
   android:paddingBottom="@dimen/activity_vertical_margin"
   android:paddingLeft="@dimen/activity_horizontal_margin"
   android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity vertical margin"
   tools:context="com.tutorialsface.final5.MainActivity">
   <TextView
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:text="WebView!"
        android:id="@+id/textView" />
    <EditText
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:id="@+id/editText"
       android:layout below="@+id/textView"
        android:layout alignParentStart="true"
        android:text="Enter Text" />
```

```
<WebView
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:id="@+id/webView"
        android:layout_below="@+id/editText"
        android:layout_alignParentStart="true" />
    <Button
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="Enter"
        android:id="@+id/button"
        android:layout below="@+id/webView"
        android:layout_alignParentStart="true"
        android:layout_marginTop="37dp" />
</RelativeLayout>
package com.tutorialsface.final5;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.webkit.WebView;
import android.webkit.WebViewClient;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
    Button b;
   EditText e;
   WebView w;
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
       b = (Button) findViewById(R.id.button);
        e = (EditText) findViewById(R.id.editText);
        w = (WebView) findViewById(R.id.webView);
        w.setWebViewClient(new MyBrowser());
       b.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String url = e.getText().toString();
                w.getSettings().setLoadsImagesAutomatically(true);
                w.getSettings().setJavaScriptEnabled(true);
                w.setScrollBarStyle(View. SCROLLBARS INSIDE OVERLAY);
                w.loadUrl(url);
        });
    }
   public class MyBrowser extends WebViewClient {
        @Override
        public boolean shouldOverrideUrlLoading(WebView view, String url) {
            view.loadUrl(url);
            return true;
        }
```

}

6...Implement an app to store and retrieve data by using shared preference.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match parent"
    android:paddingBottom="@dimen/activity vertical margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity horizontal margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.tutorialsface.final6.MainActivity">
    <LinearLayout</pre>
        android:orientation="vertical"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_alignParentTop="true"
        android:layout_alignParentStart="true">
        <EditText
            android:layout width="match parent"
            android: layout height="wrap content"
            android: id="@+id/editText"
            android:text="Name" />
        <EditText
            android:layout width="match parent"
            android:layout height="wrap content"
            android:id="@+id/editText2"
            android:text="Email" />
        <LinearLayout</pre>
            android:orientation="horizontal"
            android:layout width="match parent"
            android: layout height="wrap content">
            <Button
                android:layout width="wrap content"
                android:layout height="wrap content"
                android: text="Save"
                android:onClick="savee"
                android:id="@+id/button" />
            <Button
                android:layout width="wrap content"
                android: layout height="wrap content"
                android:text="Clear"
                android:onClick="clearr"
                android:id="@+id/button2" />
            <Button
```

```
android:layout width="wrap content"
                android:layout height="wrap content"
                android:text="Retreive"
                android:onClick="rett"
                android:id="@+id/button3" />
        </LinearLayout>
    </LinearLayout>
</RelativeLayout>
package com.tutorialsface.final6;
import android.content.Context;
import android.content.SharedPreferences;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
    EditText n.e:
    SharedPreferences sharedPreferences;
   public static final String myprefrence = "mypref";
   public static final String Name = "namekey";
   public static final String Email = "emailkey";
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        n = (EditText) findViewById(R.id.editText);
        e = (EditText) findViewById(R.id.editText2);
        sharedPreferences = getSharedPreferences(myprefrence, Context.MODE PRIVATE);
   public void savee(View view) {
        String name = n.getText().toString();
        String email = e.getText().toString();
        SharedPreferences.Editor editor = sharedPreferences.edit();
        editor.putString(Name, name);
        editor.putString(Email, email);
        editor.commit();
   public void clearr(View view) {
        n.setText("");
        e.setText("");
   public void rett(View view) {
        n.setText(sharedPreferences.getString(Name,""));
        e.setText(sharedPreferences.getString(Email,""));
```

7...Implement Option menu concept in application to choose between two activities.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout height="match parent"
    android:paddingBottom="@dimen/activity vertical margin"
    android:paddingLeft="@dimen/activity horizontal margin"
    android:paddingRight="@dimen/activity horizontal margin"
    android:paddingTop="@dimen/activity vertical margin"
    tools:context="com.tutorialsface.final7.MainActivity">
    <TextView
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="First Activity!" />
</RelativeLayout>
package com.tutorialsface.final7;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
public class MainActivity extends AppCompatActivity {
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
   public boolean onCreateOptionsMenu(Menu menu) {
        MenuInflater inflater = getMenuInflater();
        inflater.inflate(R.menu.menu_main, menu);
        return true;
   public boolean onOptionsItemSelected(MenuItem item) {
        switch (item.getItemId()){
            case R.id. f1:
                Intent i = new Intent(this, MainActivity.class);
                startActivity(i);
                return true;
            case R.id. f2:
                Intent j = new Intent(this, MainActivity2.class);
                startActivity(j);
                return true;
            default:
                return super.onOptionsItemSelected(item);
        }
    }
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
```

```
android:paddingRight="@dimen/activity horizontal margin"
    android:paddingTop="@dimen/activity vertical margin"
    tools:context="com.tutorialsface.final7.MainActivity2">
    <TextView
        android:layout width="wrap content"
        android: layout height="wrap content"
        android:text="Second Activity!" />
</RelativeLayout>
package com.tutorialsface.final7;
import android.content.Intent;
import android.os.Bundle;
import android.support.v7.app.AppCompatActivity;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
public class MainActivity2 extends MainActivity{
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main2);
    }
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:id="@+id/f1"</pre>
        android:title="firstActivity"
    <item android:title="secondActivity"</pre>
        android:id="@+id/f2"
</menu>
```

8... Implement context menu concept in application to change the background color.

```
android:layout height="wrap content"
        android:id="@+id/textV"
        android:text="Hello World!" />
</RelativeLayout>
package com.tutorialsface.final8;
import android.content.Context;
import android.graphics.Color;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.ContextMenu;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.view.View;
import android.widget.RelativeLayout;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    RelativeLayout rl;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        rl = (RelativeLayout) findViewById(R.id.RelLay);
        TextView textView = (TextView) findViewById(R.id.textV);
        registerForContextMenu(textView);
    public void onCreateContextMenu(ContextMenu menu, View v,
ContextMenu.ContextMenuInfo menuInfo) {
        super.onCreateContextMenu(menu, v, menuInfo);
        MenuInflater inflater = getMenuInflater();
        inflater.inflate(R.menu.menu_main, menu);
   public boolean onContextItemSelected(MenuItem item) {
        rl = (RelativeLayout) findViewById(R.id.RelLay);
        switch (item.getItemId()) {
            case R.id.option1:
                rl.setBackgroundColor(Color.RED);
                return true;
            case R.id.option2:
                rl.setBackgroundColor(Color.BLUE);
                return true;
            case R.id.option3:
                rl.setBackgroundColor(Color.GREEN);
                return true;
            default:
                return false;
        }
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:id="@+id/option1"</pre>
        android:title="Red"/>
    <item android:id="@+id/option2"</pre>
        android:title="Blue"/>
    <item android:id="@+id/option3"</pre>
```

android:title="Green"/>

9... Write an app to send SMS using Intent class.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity horizontal margin"
    android:paddingTop="@dimen/activity vertical margin"
    tools:context="com.tutorialsface.final9.MainActivity">
    <LinearLayout</pre>
        android:orientation="vertical"
        android:layout width="match parent"
        android:layout height="match parent"
        android:layout_alignParentTop="true"
        android:layout_alignParentStart="true">
        <EditText
            android:layout width="match parent"
            android: layout height="wrap content"
            android:id="@+id/editText" />
        <EditText
            android: layout width="match parent"
            android:layout height="wrap content"
            android:id="@+id/editText2" />
        <Button
            android:layout_width="wrap_content"
            android:layout height="wrap content"
            android: text="SEND"
            android:id="@+id/button" />
    </LinearLayout>
</RelativeLayout>
package com.tutorialsface.final9;
import android.app.PendingIntent;
import android.content.Intent;
import android.net.Uri;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.telephony.SmsManager;
import android.util.Log;
import android.view.Menu;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
```

```
public class MainActivity extends AppCompatActivity {
    Button buttonSend;
   EditText ph,m;
    @Override
   public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        buttonSend = (Button) findViewById(R.id.button);
        ph = (EditText) findViewById(R.id.editText);
        m = (EditText) findViewById(R.id.editText2);
        buttonSend.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                sendSMS();
            public void sendSMS(){
                try {
                        String phoneNumber = "+91"+ph.getText().toString();
                        String message = m.getText().toString();
                        Intent intent = new Intent(Intent.ACTION_VIEW,
Uri.parse("sms:" + phoneNumber));
                        intent.putExtra("sms body", message);
                        startActivity(intent);
                        Toast.makeText(getApplicationContext(), "SMS SENT!",
Toast. LENGTH_LONG) . show();
                } catch (Exception e) {
                    Toast.makeText(getApplicationContext(), "SMS faild, please try
again later!", Toast.LENGTH LONG).show();
                    e.printStackTrace();
        });
    }
```

10... Implement phone call concept in application by passing number from the user.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context="com.tutorialsface.final10.MainActivity">

<EditText</pre>
```

```
android:layout width="wrap content"
        android:layout height="wrap content"
        android:ems="10"
        android:id="@+id/editText"
        android:layout alignParentTop="true"
        android:layout centerHorizontal="true"
        android:layout marginTop="51dp" />
    <Button
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="Call"
        android:id="@+id/button"
        android:layout_below="@+id/editText"
        android:layout centerHorizontal="true"
        android:layout_marginTop="80dp" />
</RelativeLayout>
package com.tutorialsface.final10;
import android.Manifest;
import android.content.Intent;
import android.content.pm.PackageManager;
import android.net.Uri;
import android.support.v4.app.ActivityCompat;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
    Button b;
   EditText e;
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        b = (Button) findViewById(R.id.button);
        e = (EditText) findViewById(R.id.editText);
        b.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String n = e.getText().toString();
                Intent i = new Intent(Intent.ACTION DIAL);
                i.setData(Uri.parse("tel:+91"+n));
                startActivity(i);
       });
    }
```

11... Demonstrate the sending of an email with the help of a registered email client on your android phone.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity horizontal margin"
    android:paddingTop="@dimen/activity vertical margin"
    tools:context="com.tutorialsface.final11.MainActivity">
    <LinearLayout</pre>
        android:orientation="vertical"
        android:layout width="match parent"
        android:layout height="match parent"
        android:layout alignParentTop="true"
        android:layout alignParentStart="true">
        <TextView
            android:layout_width="wrap_content"
            android: layout height="wrap content"
            android:text="Mail Id : "
            android:id="@+id/textView" />
        <EditText
            android:layout width="match parent"
            android: layout height="wrap_content"
            android: id="@+id/editText"
            android:layout gravity="center horizontal" />
        <TextView
            android:layout_width="wrap_content"
            android: layout height="wrap content"
            android: text="Subject : "
            android:id="@+id/textView2" />
        <EditText
            android:layout width="match parent"
            android: layout height="wrap content"
            android:id="@+id/editText2" />
        <TextView
            android: layout width="wrap content"
            android:layout height="wrap content"
            android:text="Body : "
            android:id="@+id/textView3" />
        <EditText
            android:layout_width="match_parent"
            android:layout height="wrap content"
            android:id="@+id/editText3" />
        <Button
            android:layout_width="wrap_content"
            android:layout height="wrap content"
            android: text="SEND"
            android:id="@+id/button" />
    </LinearLayout>
</RelativeLayout>
```

```
package com.tutorialsface.final11;
import android.content.Intent;
import android.net.Uri;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
   EditText e1,e2,e3;
   Button b;
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        e1 = (EditText) findViewById(R.id.editText);
        e2 = (EditText) findViewById(R.id.editText2);
        e3 = (EditText) findViewById(R.id.editText3);
        b = (Button) findViewById(R.id.button);
        b.setOnClickListener(new View.OnClickListener() {
            public void onClick(View view) {
                sendEmail();
        });
    }
   protected void sendEmail() {
        Intent intent = new Intent(Intent.ACTION SENDTO); // it's not ACTION SEND
        intent.setType("text/plain");
        intent.putExtra(Intent.EXTRA_SUBJECT, ""+e2.getText().toString());
        intent.putExtra(Intent.EXTRA_TEXT, ""+e3.getText().toString());
        intent.setData(Uri.parse("mailto:"+e1.getText().toString())); // or just
"mailto:" for blank
       intent.addFlags(Intent.FLAG ACTIVITY NEW TASK); // this will make such that
when user returns to your app, your app is displayed, instead of the email app.
       startActivity(intent);
```

12... Make dialogue box to confirm the change of background color or image

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:paddingBottom="@dimen/activity_vertical_margin"
   android:paddingLeft="@dimen/activity_horizontal_margin"
   android:paddingRight="@dimen/activity_horizontal_margin"
   android:paddingTop="@dimen/activity_vertical_margin"
   android:d="@+id/RelLay"
   tools:context="com.tutorialsface.final12.MainActivity">
```

```
<Button
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="Change???"
        android:id="@+id/button"
        android:layout centerVertical="true"
        android:layout centerHorizontal="true" />
</RelativeLayout>
package com.tutorialsface.final12;
import android.content.DialogInterface;
import android.graphics.Color;
import android.support.v7.app.AlertDialog;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RelativeLayout;
import java.util.Random;
public class MainActivity extends AppCompatActivity {
   Button bt;
   RelativeLayout rl;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        bt = (Button) findViewById(R.id.button);
        rl = (RelativeLayout) findViewById(R.id.RelLay);
        bt.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                AlertDialog.Builder builder;
                builder = new AlertDialog.Builder(MainActivity.this);
                builder.setTitle("Change?")
                        .setMessage("Are you sure you want to change the color?")
                        .setPositiveButton("YES", new
DialogInterface.OnClickListener() {
                            public void onClick(DialogInterface dialog, int which) {
                                Random rnd = new Random();
rl.setBackgroundColor(Color.rgb(rnd.nextInt(256),rnd.nextInt(256),rnd.nextInt(256)));
                        .setNegativeButton("NO", new DialogInterface.OnClickListener()
{
                            public void onClick(DialogInterface dialog, int which) {
                                // do nothing
                        })
                        .setIcon(android.R.drawable.ic dialog alert)
                        .show();
        });
    }
```

13... Capture the image using camera and set it as background for your app.

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android:layout height="match parent"
    android:paddingBottom="@dimen/activity vertical margin"
    android:paddingLeft="@dimen/activity horizontal margin"
    android:paddingRight="@dimen/activity horizontal margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:id="@+id/RelLay"
    tools:context="com.tutorialsface.final13.MainActivity">
    <Button
        android:layout_width="wrap content"
        android:layout_height="wrap_content"
        android: text="Capture"
        android:id="@+id/button"
        android:layout centerVertical="true"
        android:layout centerHorizontal="true" />
</RelativeLayout>
package com.tutorialsface.final13;
import android.app.Activity;
import android.content.Intent;
import android.graphics.Bitmap;
import android.graphics.drawable.BitmapDrawable;
import android.net.Uri;
import android.os.Environment;
import android.provider.MediaStore;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.RelativeLayout;
import java.io.File;
import java.text.SimpleDateFormat;
import java.util.Date;
public class MainActivity extends AppCompatActivity {
    Button bt;
   RelativeLayout rl;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        bt = (Button) findViewById(R.id.button);
        rl = (RelativeLayout) findViewById(R.id.RelLay);
        bt.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent takePictureIntent = new
```

```
Intent (MediaStore.ACTION IMAGE CAPTURE);
                if (takePictureIntent.resolveActivity(getPackageManager()) != null) {
//if not compulsory
                    startActivityForResult(takePictureIntent, 1);
                }
            }
        });
   protected void onResume() {
        super.onResume();
   public void onActivityResult(int requestCode, int resultCode, Intent data) {
        if (requestCode == 1 && data != null ) {
            Bundle extras = data.getExtras();
            if (extras != null) {
                Bitmap photo = (Bitmap) extras.get("data");
                if (photo != null) {
                    r1.setBackground(new BitmapDrawable(getResources(), photo));
            }
       }
    }
```